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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,629	07/15/2004	Nadejda G Gurskaya	EVRO/0006	9951

7590 01/23/2008  
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EXAMINER
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MONSHIPOURI, MARYAM

ART UNIT	PAPER NUMBER
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1656

MAIL DATE	DELIVERY MODE
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01/23/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/501,629	GURSKAYA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Maryam Monshipouri	1656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21, 24-32 and 34 is/are pending in the application.
- 4a) Of the above claim(s) 8-10, 12, 13, 15-17, 19, 20, 26-28 and 30 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 34 is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4-7, 11, 18 and 21 is/are rejected.
- 7) ☒ Claim(s) 3, 24, 25, 29, 31 and 32 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>see attachment 3+4</u>                 |

Claims 1-7, 11, 14, 18, 21, 31-33, and newly added claim 34 (species: DNA encoding SEQ ID NO:2 with E222G mutation further comprising V11I, F64L, K101E, T206A, SEQ ID NO:12 only) are still at issue and are present for examination. Claims 8-10, 12-13, 15-17, 19-20, 26-28, 30 are withdrawn as drawn to non-elected invention. Claims 22-23, 33 are canceled.

Applicants' arguments filed on 10/30/2007, have been fully considered and are deemed to be persuasive to overcome some of the rejections previously applied. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 6 remain rejected under 35 U.S.C. 102(b) as being anticipated by Inouye et al (cited previously) according to previous office action. In traversal of this rejection applicant argues the following: **(1)** he/she has amended claim 1 to recite "an amino acid sequence at least 96% identical to Aequorea coerulescens non-fluorescent protein of SEQ ID NO:2 and Inouye et al. fail to teach such percent identity. **(2)** the divergence in sequences of fluorescent protein from Aequorea victoria (i.e. Inouye's sequence) and the non-fluorescent protein of this invention differentiates the two species. **(3)** Altering the fluorescent of one species as is the case of cited art, is

materially different than turning a non-fluorescent protein into a different species. **(4)** Even if by changing the alignment parameters Inouye's sequence can be shown to display 95% identity to SEQ ID NO:2, 96% identity as currently recited in claim 1 would overcome the art. In addition, in view of applicant, mere reliance on the knowledge of prior art without providing any evidence that sequence identity of 95% between sequence of Inouye and SEQ ID NO:2 of this invention is even achievable is improper.

These arguments were fully considered but were found **unpersuasive**. With respect to applicant's **first** and **fourth** arguments applicant is kindly requested to review the new attached sequence alignment data (attachment #3) prepared based on the modified alignment parameters as indicated on said document. As applicant can appreciate, the instant alignment data displays a sequence identity of 97.5% to SEQ ID NO:2 of this invention, meeting the limitation of claim 1 and can be relied upon as proper evidence in support of examiner's position.

In response to applicant's **second** argument it should be noted that instant claim 1 is not directed to SEQ ID NO:2 but its variants and said variants are broad enough to read on Aequorea victoria fluorescent protein.

With regards to applicant's **third** argument it should be noted that instant invention is directed to products and not the methods of preparing them. Therefore applicant's argument is irrelevant.

In conclusion, the rejection remains for the response provided above, in addition to those provided previously.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

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granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4-7, 11, 14, 18, 21 remain rejected under 35 U.S.C. 102(e) as being anticipated by Stubbs et al. (cited previously) according to previous office action.

Applicant merely relies on the same arguments provided above for overcoming this rejection. Said arguments have already been addressed above (please see attachment #4).

### ***Allowable Subject Matter***

Claims 3, 24, 25, 29, 31, 32 remain under objection as indicated in the previous office action but would be allowable if written in independent form.

**Claim 34 is allowed** for the reasons of record.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maryam Monshipouri whose telephone number is (571) 272-0932. The examiner can normally be reached on Tues.-Fri., from 7:00 a.m to 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathleene Kerr Bragdon can be reached on (571) 272-0931. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Maryam Monshipouri Ph.D.

Primary Examiner